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Attention: (8e) Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
401 M Street, SW
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COMPANY SANITIZED

Ladies and Gentlemen:

Subject: Notice in Accordance to TSCA Section 8(e) – Preliminary results of the sublethal effects on the rainbow trout in a flow-through system with a developmental fungicide.

BASF Corporation is submitting preliminary results of the sublethal toxic effects on the rainbow trout (Oncorhynchus mykiss WALBAUM 1792) in a flow-through system (28 days), with a a developmental fungicide (substituted benzyl ether), conducted by BASF Aktiengesellschaft, Ludwigshafen, Germany. Shipments totaling approximately 1.7 kilograms active ingredient have been shipped to the U.S. since 1993.

Attached is a summary of the study from a draft report provided by BASF AG.

Although BASF Corporation does not feel that this information presents a substantial risk to health or environment, it is being submitted under Section 8(e) of TSCA. Any reports or additional information that we receive will be forwarded to the Agency and Material Safety Data Sheets will be updated with this preliminary information.

If you have any questions, please feel free to call me at (734) 324-6207.

Very Truly Yours,

BASF Corporation

Edward J. Kerfoot

Edward J. Kerfoot, Ph.D.
Director, Toxicology and Product Regulations

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STUDY TITLE

Report

- Sublethal toxic effects on the rainbow trout (Oncorhynchus mykiss WALBAUM 1792) in a flow-through system (28 days)

DATA REQUIREMENT

OECD 204

(considering e.g. the growth parameter body weight according to the OECD Draft Guideline "Fish, Juvenile Growth Test - 28 days", March 1992)

AUTHOR

Dr.rer.nat. R. Munk (Study Director)

STUDY COMPLETED ON

February 04, 1999

Department of Toxicology of
BASF Aktiengesellschaft
D-67056 Ludwigshafen/Rhein, FRG

LABORATORY PROJECT IDENTIFICATION

Project No.: 42F0360/965080

SUMMARY

was tested for its sublethal toxic effects on the rainbow trout, 20 fish/test group, in the concentrations 0 (control); 0.000316; 0.001; 0.00316; 0.01 and 0.0316 mg/l in a flow-through system for a period of 4 weeks, and the following results were obtained:

Mortality:

- Mortality only occurred in the highest substance concentration 0.0316 mg/l. It started on day 1 (10%) and increased to 55% on day 8. No further increase in mortality until day 28 (end of study) was noted.
- The lowest concentration at which compound-related mortalities occurred was 0.0316 mg/l.
- The threshold level of lethal effects was greater than 0.01 and smaller than 0.0316 mg/l.

The "No Observed Adverse Effect Concentration (NOAEC)" for mortality was 0.01 mg/l.

Toxic signs (symptoms):

- Compound-related toxic signs were observed only in the highest concentration 0.0316 mg/l, starting on day 26 in the form of reduced or no food uptake and swimming near the bottom. On day 28 (end of study) when the fish were thoroughly inspected when being weighed damage to the eyes was seen in the form of opacity in 6 of 9 fishes (4 severe on both sides, 2 moderate on both sides).
- The threshold level for toxic signs (= symptoms) was greater than 0.01 and smaller than 0.0316 mg/l.
- The "No Observed Adverse Effect Concentration (= NOAEC)" for toxic signs (= symptoms) was 0.01 mg/l.

Body weight and length (growth parameters):

At the end of the study, the mean body weight and length were not statistically significantly different from the control group. In the highest concentration 0.0316 mg/l there was, however, a marginal decrease of body weight gain and a marginal decrease in gain in length (approx. 3%) which may be biologically significant.

Under the conditions of this study, the threshold level for the impairment of the growth parameters body weight and length was 0.0316 mg/l.

The "No Observed Adverse Effect Concentration (NOAEC)" for the impairment of the growth parameters body weight and length was 0.01 mg/l.

Analytical concentration control:

The mean analytically detected concentrations of in the aquaria was in the range of the nominal concentrations during the whole study period.

Conclusion:

Under the conditions of this study, the overall "No Observed Adverse Effect Concentration (= NOAEC)" was determined to be 0.01 mg/l for the rainbow trout (nominal concentration).

The threshold level for compound-related lethal effects and for toxic signs (= symptoms) was greater than 0.01 and smaller than 0.0316 mg/l and for the impairment of the growth parameters body weight and length the threshold level was 0.0316 mg/l (nominal concentration).

The mean analytically detected concentrations of , measured in the aquaria, were in the range of the nominal concentrations during the whole study period.